TRACETREE RAT2 User Manual



Contents

Chapter 1: Ready , Install Begin Use

1. Welcome
2. Standard parts
3， Attention before use
   1 SIM card (Phone card) use instruction
   2 Install SIM card
   3 Install Device
   4，Programme LED indicate

Chapter 2: Function

1 LBS locate
2 SMS locate
3 Link Locate
4 Real time tracking
5 Cancel Real time tracking
6 Add preset number
7 Check Preset number
8 Delete Preset Number
9 Change Password
10 Check Password
11 Default (Reset)
12 Move Alarm
13 Over Speed Alarm
14 Geo-Fence Alarm
15 Low battery Alarm
16 Cancel All Alarm
17 Upload Interval Set up
18 Time Zone set up
19SOS Alarm
20 Set IP
21 Set APN
22 Set User name and password
23 Check ID
24 Turn off tracker by SMS command

Chapter 3 :Mobile Tracking Application Function

1. GPRS version of Mobile Tracking Application function

Download Application From APP and Android Market
Choose Device
GPS locate

LBS locate
Real time tracking
Monitoring
Engine Off

Chapter 4: Free tracking Platform Function
Welcome
Language Interface
Log in Interface
Main Interface
Function

Attention
FAQ
Specification
After sale service

Chapter 1: Ready , Install , Begin Use

Thank for using **RAT2** Waterproof CAR GPS tracker , This device built in GPS and GSM

module, It can receive GPS signal to get position and send by GPRS （ belongs GSM module) to our server , User can real time tracking the car and get position though the internet . Any kind Notebook or smart phone can online tracking it , In additional, Our company engine one Mobile tracking application basic the IOS and Android software . User can visit APP or Android market and download this application ， it can use to control the device . This device is smaller design , easy installation and suit for vehicle tracking , Management and Anti-theft.

Please visit our Free Tracking platform www.tracetree.net and choose the language as your want , when your first time to log in the platform , the default log in ID and password is the last 6 S/N number of device . (Every tracker has unique S/N number stick the device background , the log in ID can't be changed , but the password can be changed)

The device can be used to company vehicles, buses, taxis, trucks, moving equipments, transportations etc. The user can add the group for their customer by themselves or request supplier support .

Free Tracking platform : www.tracetree.net , Demo ID and password : 123456

> Because the tracker built in GSM module , attention please follow the rule , Don't use the tracker near the hospital or gas station , it maybe danger.

1. Standard Parts











2. Before use

1 SIM Card(Phone Card) introduce :

This device need GSM net SIM Card ,Before install the SIM card ,please open the Caller ID ,SMS and GPRS function service . After install the SIM card ,the SIM card number is the Tracker Number ,when your use the tracker to locate ,check ,set up function ,all set up need send command to this number ,so we call it tracker number .

■ This device only use 2G GSM net ,it can't work on CDMA or 3G GSM net

■ Please confirm the PIN code had been closed before install the SIM Card.(If you use it in mobile no need input any password ,so it means has been closed)

■ Please turn off the tracker before install or take off the SIM Card.

2 Install SIM Card :

As below : First remove the rubber Button ,Pull out the SIM card socket. , and place the SIM card into the socket (ensure that the SIM card contact is facing down). Cover the rubber button.





3. Install Device:

■ After install SIM card ,please connect the device with the car battery.(12V-24V)

■ If your don't connect the car battery ,the device has its backup battery ,it can keep work 10-12 hours .

■ Attention please the device recharge voltage is 5V ,it will be danger if your connect the voltage higher than this range. Meanwhile please don't broken the fuse. When your use this device first time and there is no anymore battery ,please connect with car battery ,After 20 minutes it will work stable ,the tracker locate will get a little longer in first time

Red- 12-35V car battery 

Black- GND(Car body)

Power ON/OFF:

Power on :Prees the  until Green LED light then release the button , The device power on , and search the GSM, GPS signal , waiting for the Green and Blue LED flash , means the device work stable .

Power On: Under Power off , connect with car battery , it will automatic power on .

Power off: press  then Green LED flash , then release the button , it will power off , Press the button three times , about 2-3 sec , the LED will over means device power off .

5. Programme LED indicate

Blue LED off Green LED continue on : Power on , search GSM net

Blue LED on Green LED on : GSM signal well, GPS signal weak, GPRS can't work

Blue LED on Green LED flash: GSM signal well, GPS signal well, GPRS can't work

Blue LED Flash Green LED on : GPRS work well , GPS signal weak

Blue LED flash Green LED off: GPRS work well , GPS signal well , GPRS connect well.

Green LED off , Blue LED off : Power off

Red LED : indicate recharge the battery , Red LED light , means charging , Red LED off means no battery or full battery .

Yellow LED: Yellow LED flash indicate the device is moving , Yellow LED off means the device is quite .

Chapter 2: Function

1,Command List

Function	Fix Command format	Reply	Remark
LBS locate	LBS*000000	LBS address	If command or PW is wrong will indicate your wrong command
SMS Locate	SMS*000000	Long and Lat	
Link Locate	Link*000000	Google link	
Real time tracking	tracking*000000 every 1 minutes will send locate information	Long and Lat	
Cancel Real time tracking	Canceltracking*000000	Cancel OK	
Add Preset Number	AddNumber*000000*A*13828819646 Add B or C same command	Add Number OK	
Check preset Number	Check*000000	A: 13828819646; B: 13823764594 ; C : 15814016516	
Delete phone Number	DeleteNumber*000000*A	Delete OK	
Change PW	ChangePW*000000*123456	New PW: 123456	
Check PW	CheckPW	PW: 000000	
Default	Reset*000000		
Move Alarm	Movealarm*000000	Move alarm OK	If command or PW is wrong will indicate your wrong command
Over Speed Alarm	OverSpeed *000000*50	Over Speed OK	
Geo-Fence Alarm	Overarea*000000*100	Over area OK	
Low Battery Alarm	Only Preset Number can get alarm SMS		
Cancel All alarm	CancelAll*000000	Cancel All alarm OK	One Preset Number can get alarm message
Upload interval set up	INTERVAL*000000*000	Set Upload Interval with detail sec	The last 000 means from 015-999 sec can be set up , the upload time can't lower 15 sec

SOS	Only Preset Number can get SOS SMS		
Time zone	time*000000*+00：00	Time with battery volume	Last 00:00 explain ,First 00 means 1-13 hours , last00 means minutes ,only can set up 30 minutes.
Set IP	IP*000000*134.159.152.142,9258	IP*000000*134.159.152.142.9258	If use our platform ,No need set up IP
Set APN	APN*000000*apnname	APN:apnname & wrong Command	APN is needed set up when u use GPRS function
Set User Name and PW	USERNAME*000000*username*password	Username:username, Password:password	If set up GPRS need set up the user name or PW please set them
Check ID	ID*000000	ID:xxxxxx	If command or PW is wrong will indicate your wrong command
Turn off tracker by SMS	TURNOFF*000000	Tracker Turn Off!	

Attention: 1, Upon all command send by SMS ,if your can't get reply by SMS ,it means the GSM net is busy or not stable .the default password is "000000" ,Every command must add "*" mark.

2.There is no any preset number before selling ,Please add preset number ,then you can set up change Password and check PW function .please reference the command list to set up related function .

3，Please attention Tracking function ,If you set up this function , the tracker will send locate information to your mobile every 1 minutes .This function will cost more SMS charge.

4， If GPRS not stable ,GPS signal well ,the Tracker will storage GPS data and upload the data to the server when GPRS stable .

5,If the tracker not set preset number ,All function can be set up by strange number except Engine off alarm ,SOS alarm .

6， If there is space before the command or there is space during the command ,the tracker only reply wrong command ,it will not answer the detail reason .

7.The tracker ID is printed on the label of the tracker, the S/N number on the label is also the ID number. If the label is missing, send an SMS "ID*000000" to tracker, in which, "ID" is the fixed command and "000000" is the password. Having successfully been made, there will be a SMS "ID: HC0000TR0000004", in which, "HC0000TR0000004" is the ID and every tracker corresponds to the only number. This number is used to differentiate the tracking uploaded to the website from others.

8. After default has been set, all IP / APN / GPRS / TIME ZONE settings are reverted back to default, all

preset phone numbers are deleted and the password is changed to 123456. All the alarm settings are canceled, if the IP/APN/GPRS name& password/TIMEZONE are changed. You need to set these again by sending an SMS.

Chapter 3 :Mobile Tracking Application Function

GPRS version -- Mobile Tracking Application introduce:

This mobile control software named Mobile tracking ,it can work in IOS and Android software mobile . This kind mobile tracking has two kind version ,one version is SMS reply ,another one is GPRS reply .if use

GPRS version , so all command send and get reply will though the GPRS net . but it request the mobile open GPRS function . Under good GSM signal , you can get reply though GPRS at once . Meanwhile when your use GPRS function , your need set up APN , user name and password for your tracker . Download this application just visit APP store or Android market and search "Mobile tracking GPRS "word , then you will found this application and install it , You can begin use .

1, Mobile tracking Application Function introduce :



From the interface , the functions as below :

1, GPS locate

2, LBS locate

3, Tracking(Online Tracking)

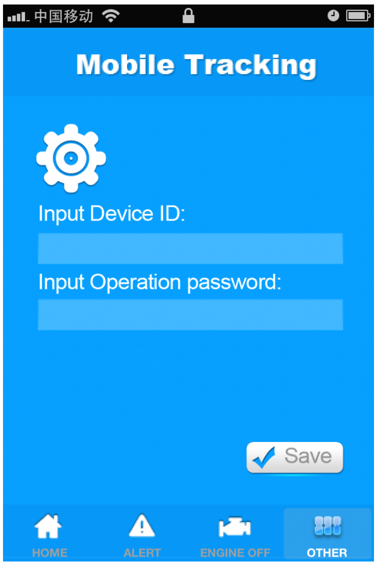
4, Monitoring (**RAT2** no this function)

5, Alarms

6, OTHER

2, Mobile tracking Application set up :

After download "Mobile tracking "application , and install it , Please input the device ID and password first in "OTHER " function as below :



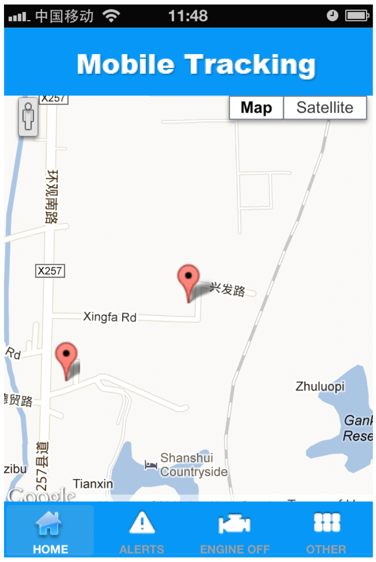
After input the device ID and password , then your can use "Mobile tracking "Application to control this device , Though this function , you can input different device ID and password and control difference device when your have more than 1 device . but just download this Mobile tracking " Application once is enough .

3, Mobile tracking Application function

As below :GPS , LSB , TRACKING and Monitoring function display .



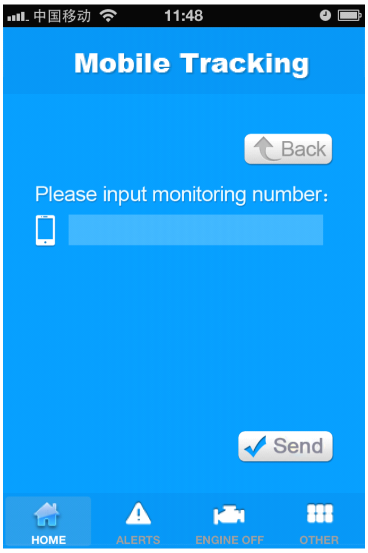




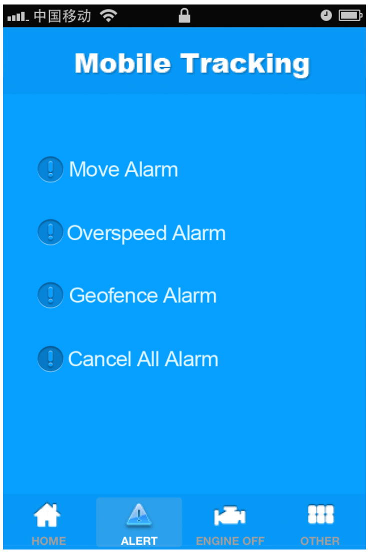
GPS locate LBS locate Tracking

Attention: when you use TRACKING function , please keep the application is open , the data will follow device upload interval time to refresh .

All the locate function just click the icon then you will get reply



Monitoring: please input the mobile number , when the tracker gets command will call this number . (attention : this number is your mobile number , not tracker's SIMCARD number)



There is different alarm functions for customer choose , just choose the function and follow the indicate to input content then the function is set up .

Attention: when you set up the function though this application , it indicates can't connect device , please try again , maybe the GPRS net not stable .

Chapter 4: Free tracking Platform

1, Welcome

This platform is professional design for Vehicle tracking management service . it fits for our company all device .the website is www.tracetree.net ,Every device has a unique S/N number and print into sticker .every device default ID and password is the last 6 number of S/N ,For example: the ID is "HC0000TR0000004" ,then the ID and password is "000004" ,Meanwhile when the sticker disappear, You can send command "ID*000000 " to device to check ID .

User can change the password and user info , For example ,Car ID number ,user phone number ,but user can't change the log in ID ,If you buy this device to tracking your company's car ,and more than 1 pcs ,you can apply to set up one term ,become the admin to manage all of your company's cars .For this function ,please contact with supplier or producer.

2.Language Interface

1, Our platform has 8 countries language ,like Chinese ,English ,German French Russian Arabic, Spanish And Portuguese as below :



3.Log in Interface

Website : www.tracetree.net

Choose the language and input the log in ID and password (the default log in ID and password is last 6 number of S/N) ,after log in ,it will change to another page as below :



4. Main Interface



Via main page ,the user can set up the function as below :

1. Refresh

2. Reset

3. Change password

4. Log out

5. Add group

6. Add user

7. Check device

8. Tracking

9. LBD locate

10. Command Center

11. Report

12. User info

13. Admin

5, Function

1. Refresh

After log in the platform , if load the map is slow , please press refresh the website. : 

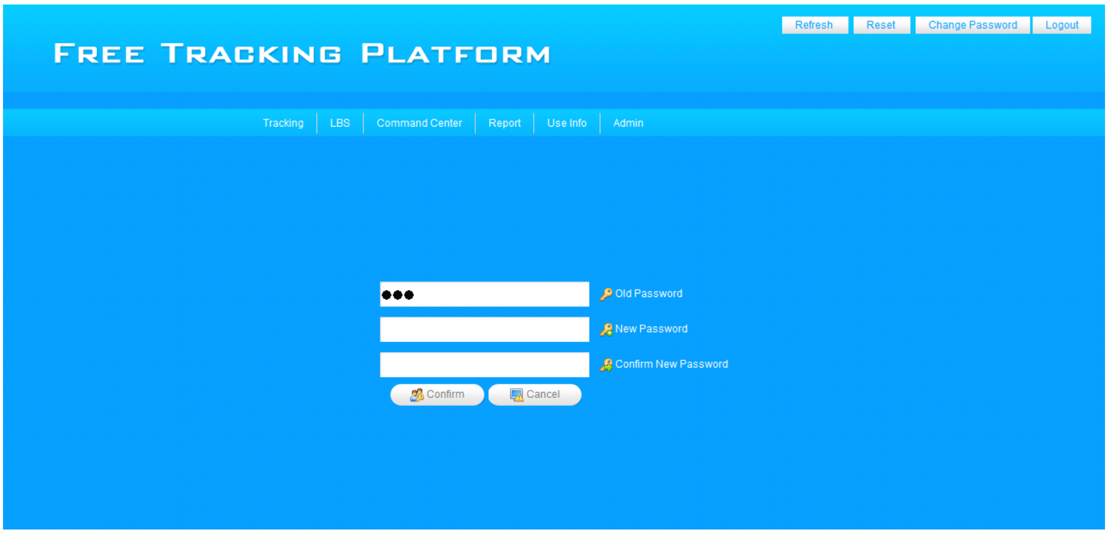
2. Reset

If the device can't upload to the server , maybe the GPRS connect has problem , so please reset the device and when you reset the device please ensure it connect with server well : 

3. Change password

As below photo , User can press 

in the platform , but attention if your changed password and forget it , please offer your tracker S/N to producer or supplier , they can help your find the password back .



4. Log out

As below :the Log out function can help customer input the log ID and password again .



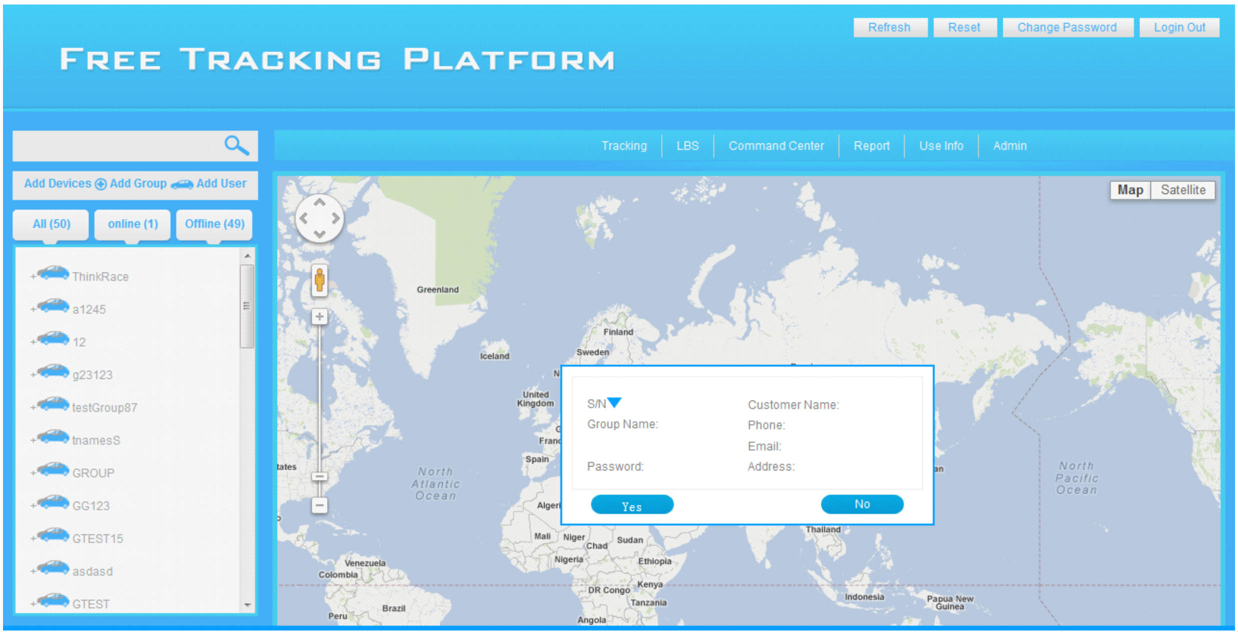
1.1 Change the device icon

User can choose the different car icon as they want , as below :



5. Add Group

If the user bought a lot of devices and plan to rent different customer , so the user can set up different group to manage , but the Group ID can't change , the Password ID can be changed device , as below :



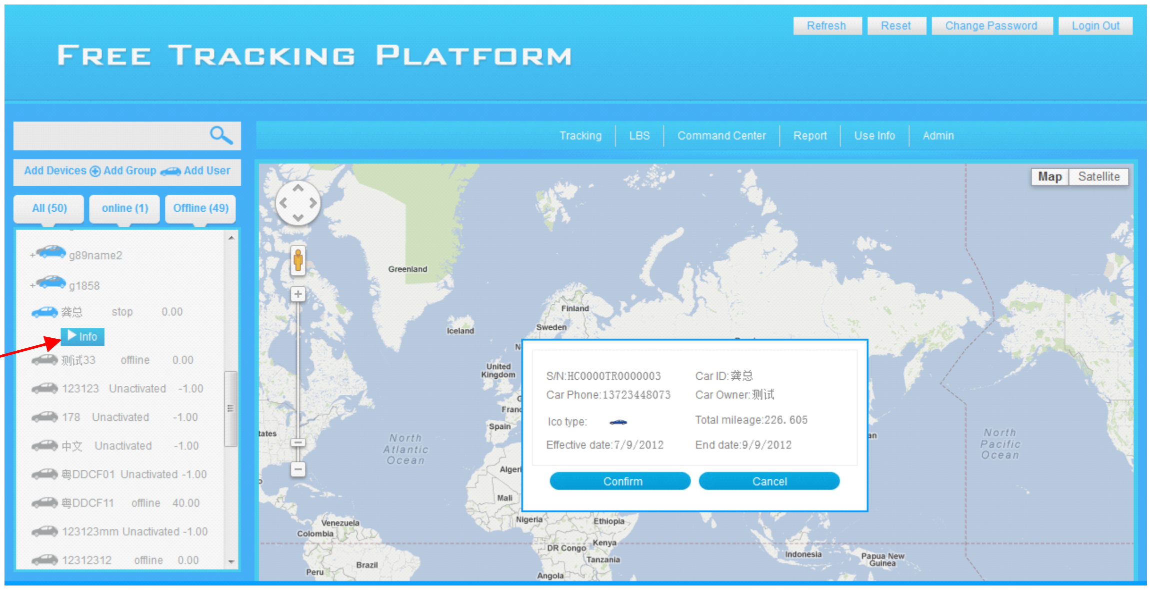
6. Add User

Add user can help customer choose the device and add to group that had been set up . as below :



7. Check device info

After user log in and want to check the device info , please find the device from the left list and press two times left button of the mouse to check the info, as below :



Via check device info , the customer can check the device expire time usually we set up the expire time is forever . But if your had rent the tracker to some one , and want to limited the time , then you can contact producer or supplier to change the expire time as you need .

8. Tracking (Online tracking)

Tracking function can help user online tracking the car and the device will upload the data every 30 sec , this upload time can be changed as user need , but the shortest time can't lower 15 sec ,



9. LBS locate

If the device GPS signal weak , the user can choose LBS to find car position , first press LBS button , and choose the device that need to check , press two times left button of the mouse , then it shows your the device position .



Attention：If the user are using this platform and under another function，please press the "tracking" button it will back to the main page.

10.Command center

There is function in the command center as below：

1.History Track

2.Geo-fence Alarm

3.Move Alarm

4.Over speed Alarm

5.Engine On (**RAT2** no this function)

6.Engine Off (**RAT2** no this function)

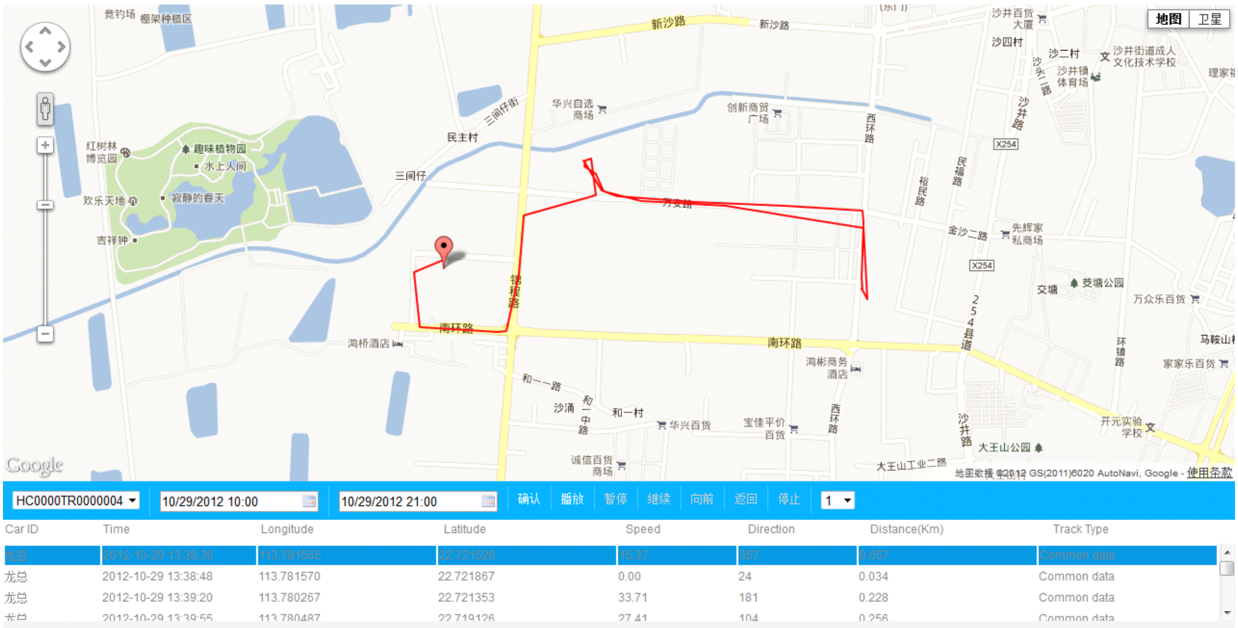
7.Monitoring (**RAT2** no this function)

8.Cancel Alarm

9.Upload interval

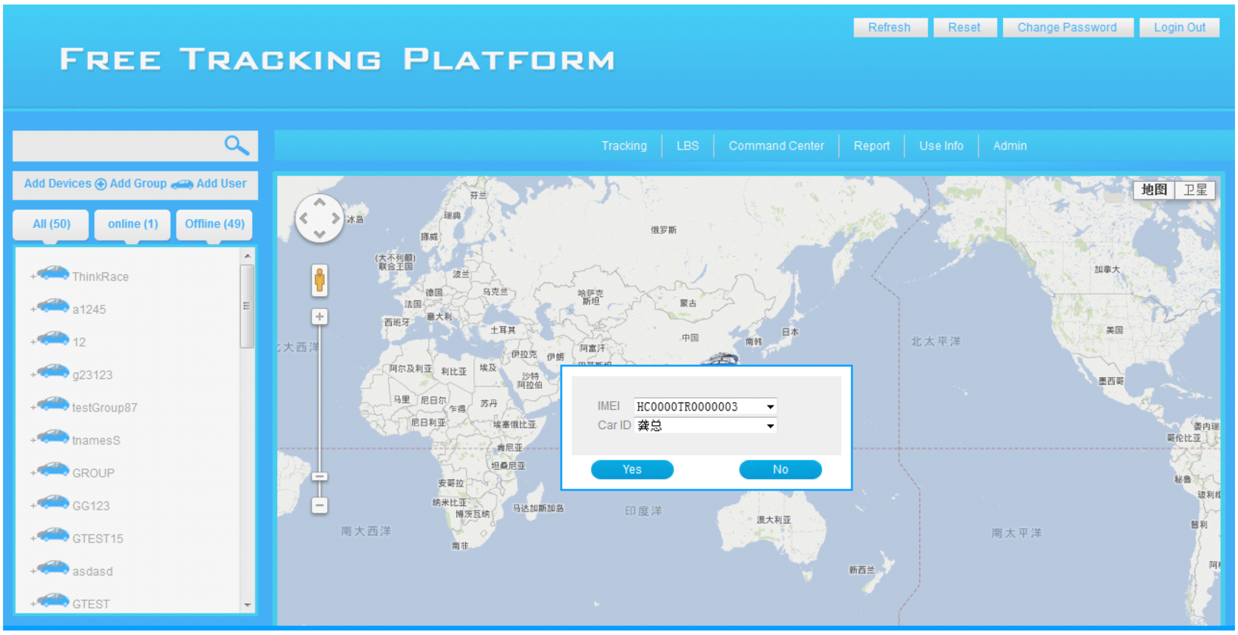
1，History track

Press History tracker button，there is new page display，as your can choose the 24 hours to check the history track

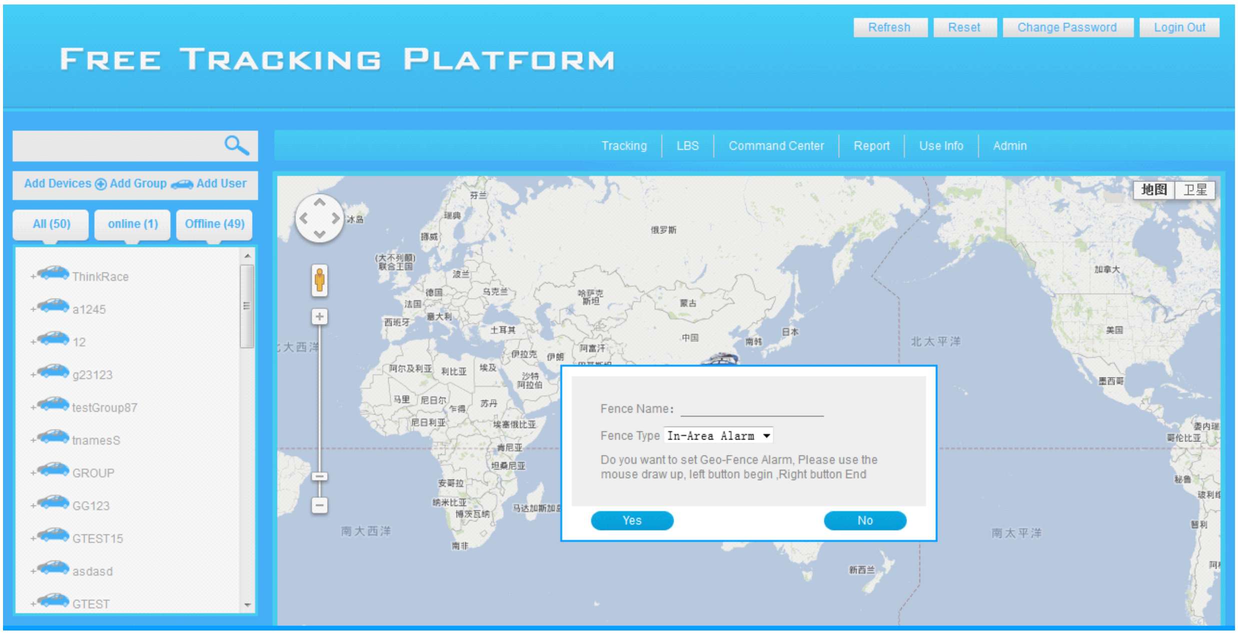


2， Geo-Fence Alarm

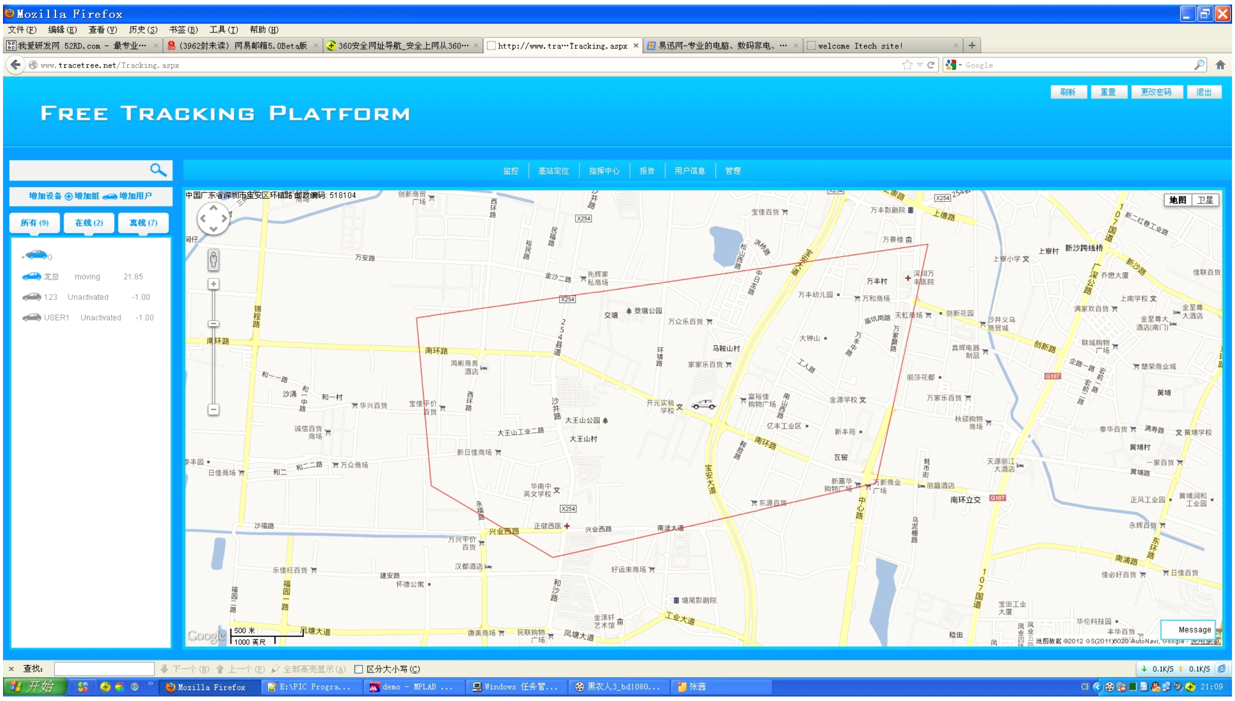
Choose the Geo Fence Alarm from the command center , There is dialog box to request user choose the device ID and CAR ID as below :



After user choose it , it changed to another dialog box and let user to named for the Geo Fence Alarm and choose the alarm style like Out area alarm or in area alarm , as below :

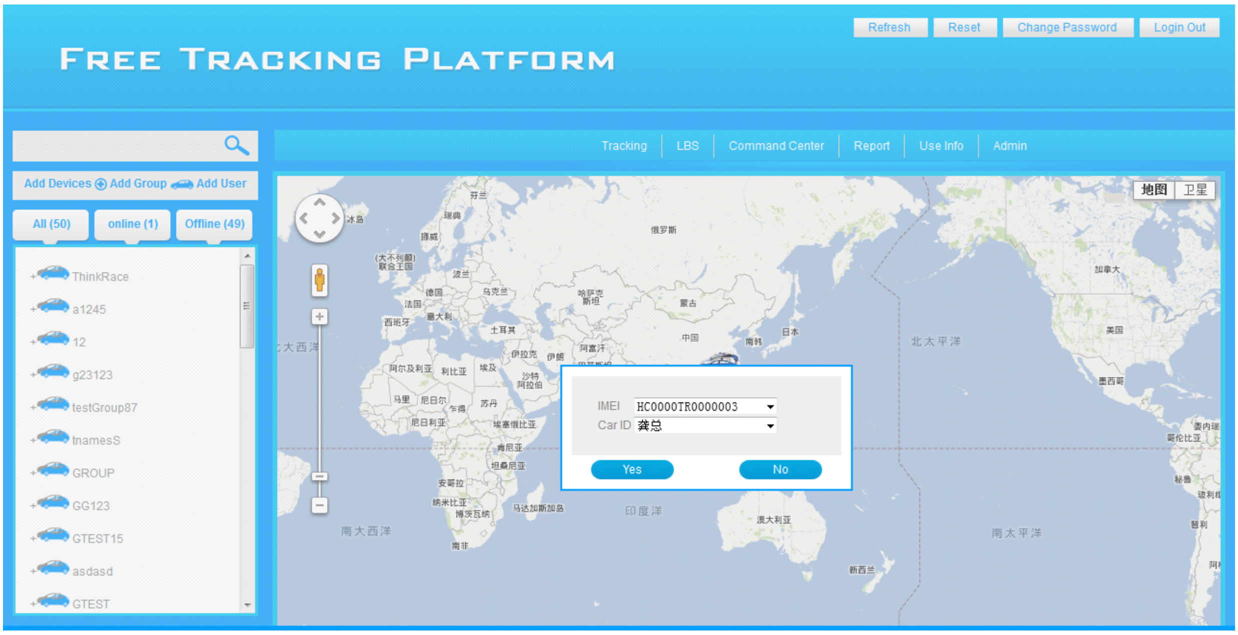


When user set up successful ,the page will change to the main page ,user can use the mouse to draw the area as they want ,Left mouse begin ,Right mouse stop and confirm the set up as below :

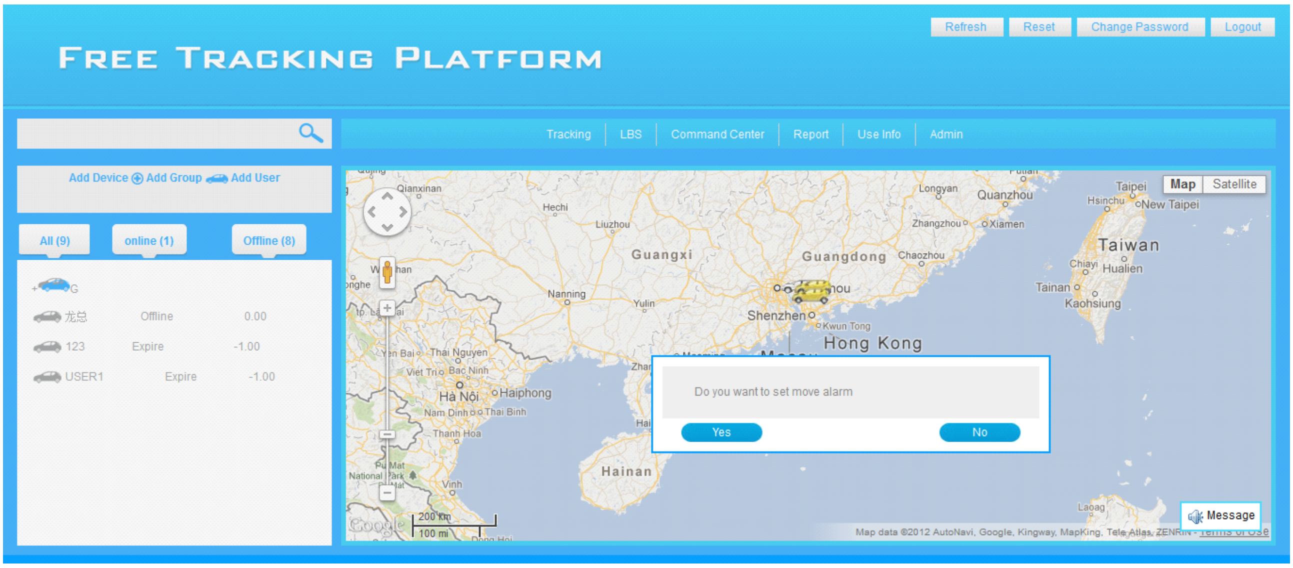


3, Move alarm

User can set up the move alarm though the Platform ,this function can protect the car and inform in time . If someone steal the car ,the user can know it quickly ,please choose this function from the Command center and set up as below :

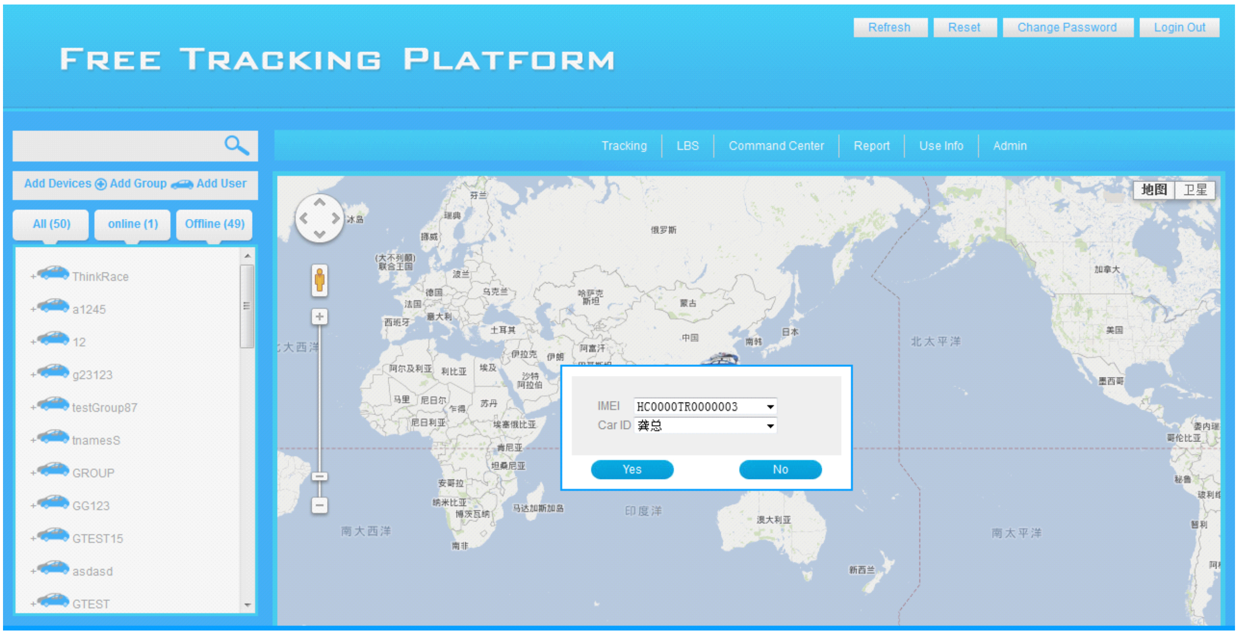


When choose the right device finished and just confirm the function , all alarm information will show in Message center as below :



4 , Over Speed Alarm

User can set up the over speed alarm in command center , they can limited the car speed to find if someone use his car or indicate user to drive slowly , the dialog box as below :



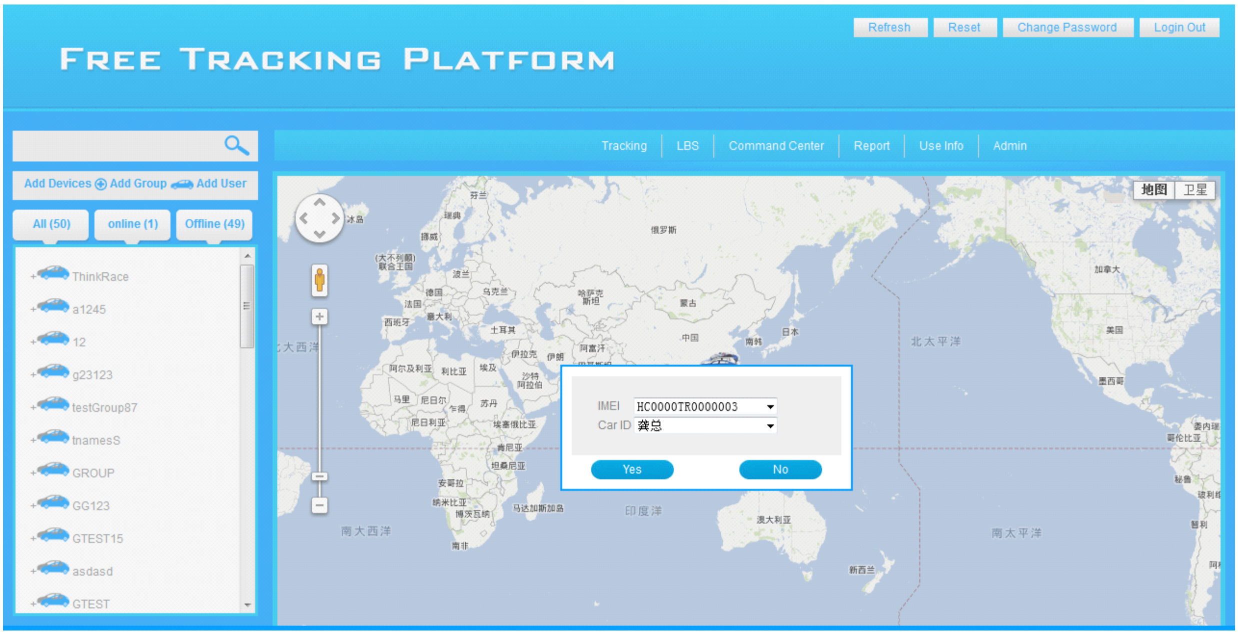
When choose the right device finished and just confirm the function , all alarm information will show in Message center as below :



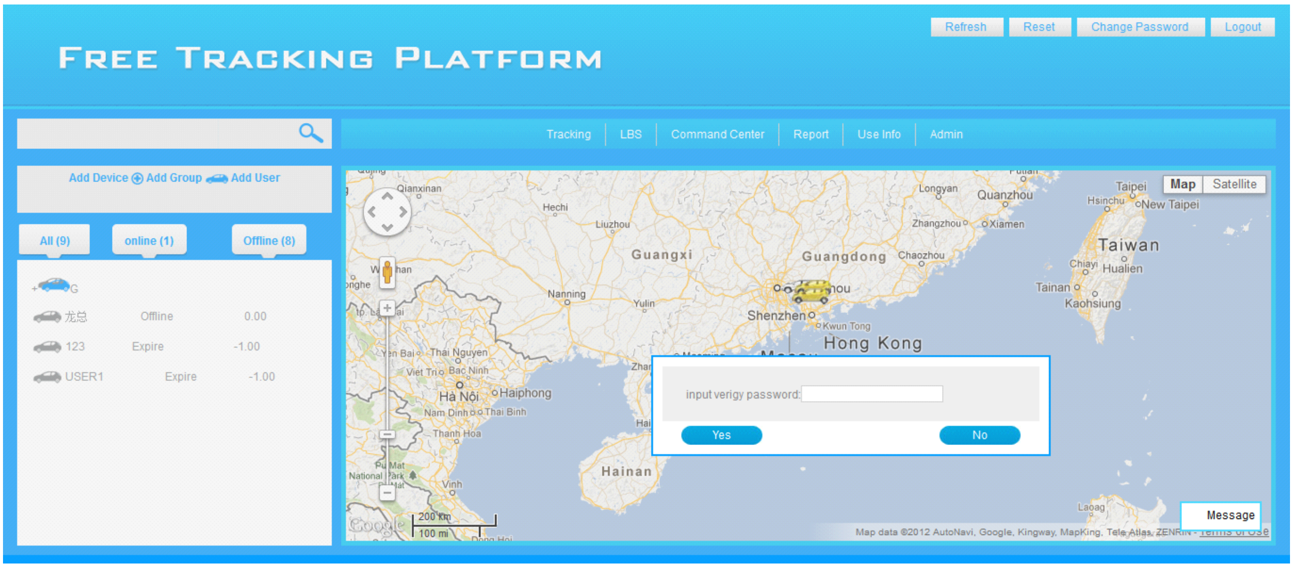
5, Engine On (RAT2 no this function)

When you want to use Engine on function , first you must ensure the engine is off , Engine on function like the CAR ALARM , if user set up the engine off in platform , and then use the remote try to start the car , they can't start it , they need use Engine on function and use the remote start again . (Attention , if user don't use the Mobile tracking application or SMS command to set cancel all alarm , They are only want to cancel engine off function , so they can use the Engine on function to cancel Engine off function) User set up Engine on

function is main useful to help user anti-theft , if someone get the car key , and they want to steal the car , but the really user set up engin off , so the car key will not useful .

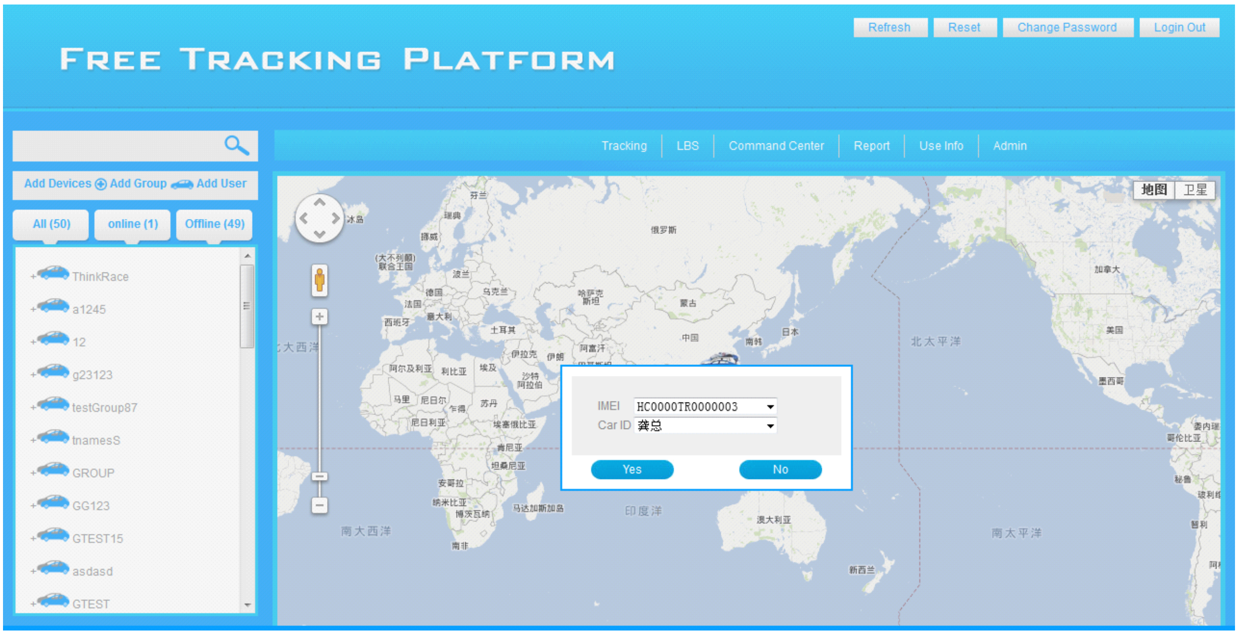


When user choose the device that need set up this function , and it will indicate user to input password to identify and confirm this set up as below :



6, Engine OFF (**RAT2** no this function)

User can set up Engine off function though the platform , if thief steal the car and stop it in wayside and want start again , they can't start it , this can help user find back the car (attention if someone driving your car and your send this command to the device , the car will power off shortly and very dangers , so we suggest customer connect the wire with ACC , don't connect with ON) the photo as below :



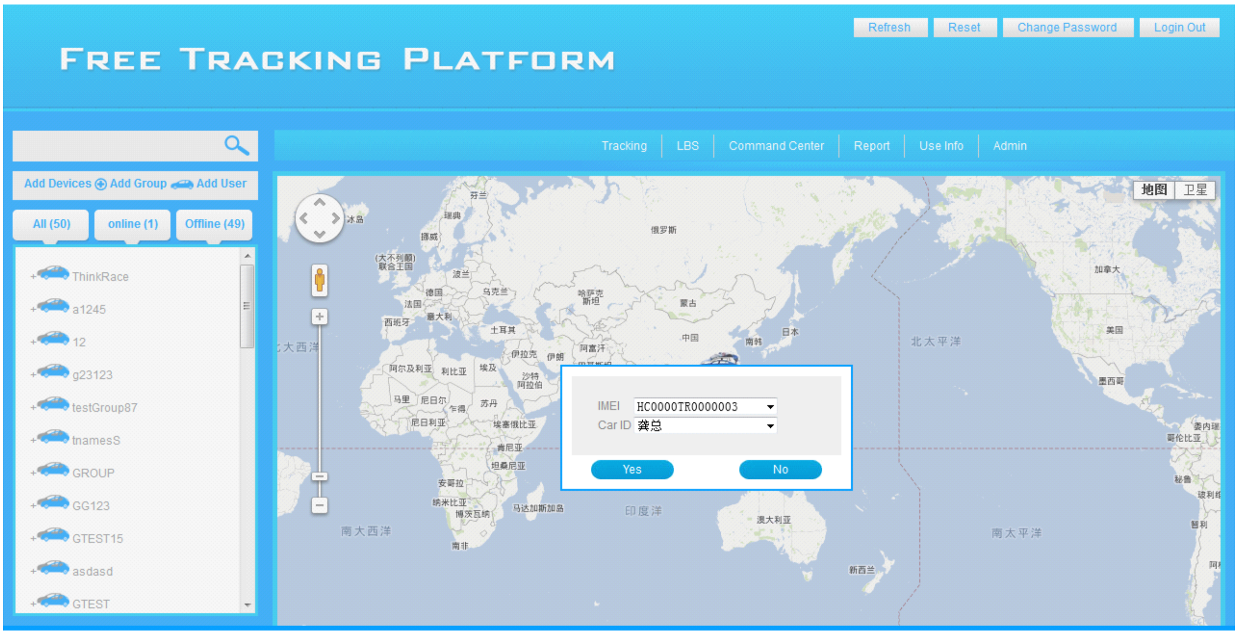
When user choose the device that need set up this function , and it will indicate user to input password to identify and confirm this set up as below :



Waring: Engine off function will make the car difficult to control and maybe cause a accident, so we recommend use this function as less as possible .

7、 Monitoring (**RAT2** no this function)

User can hear the sound inside of the car though the Monitoring function , the indicate as below :

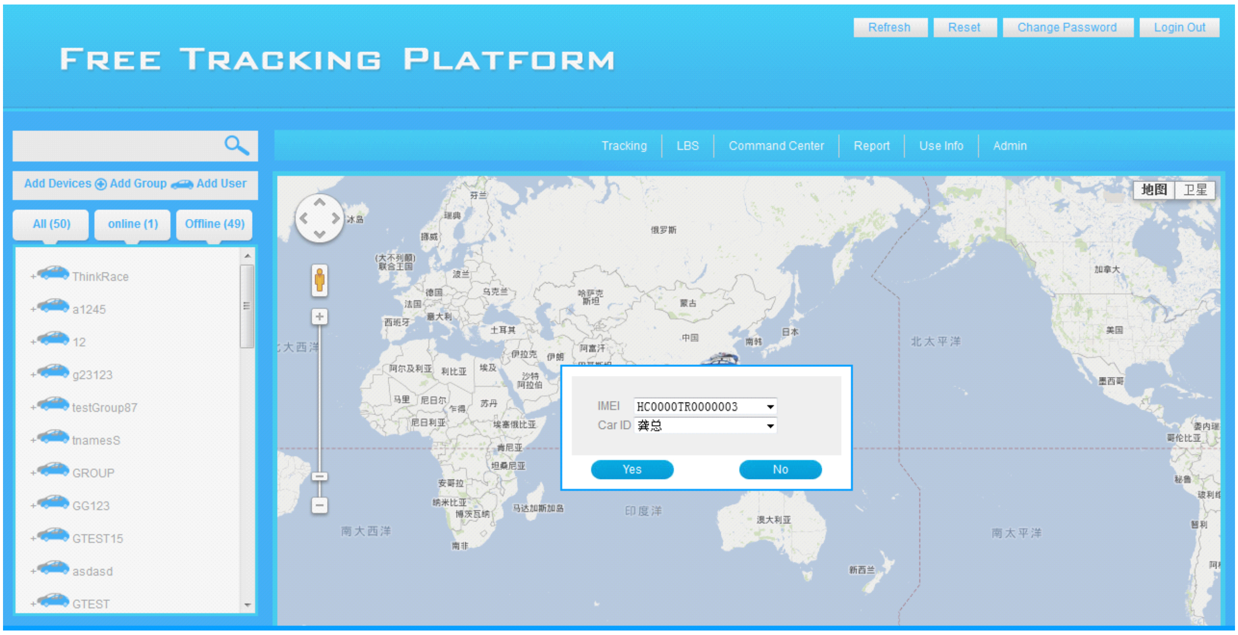


After choose the device ,there is another indicate to let user input the Mobile number ,so the command will send to tracker via platform ,and tracker will call this number ,then the user can begin monitoring ,(Attention : the Mobile number not tracker's SIMCARD number ,it is means user's Mobile number)

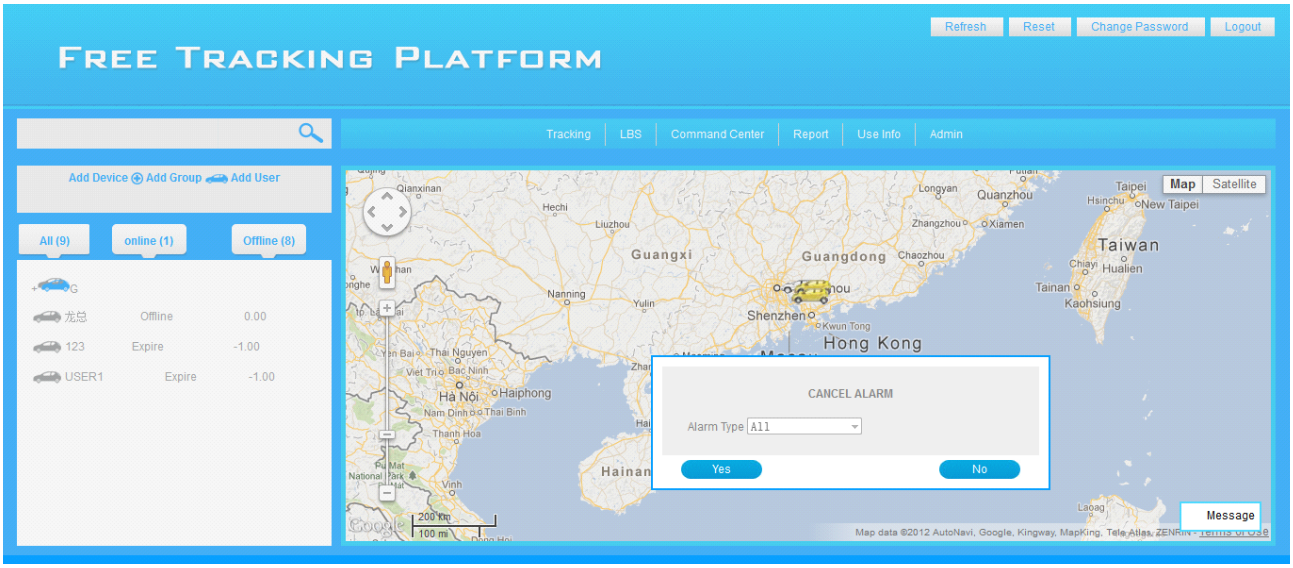


8 ,Cancel Alarm

Cancel alarm function can call all alarm that to be setted .the indicate as below :

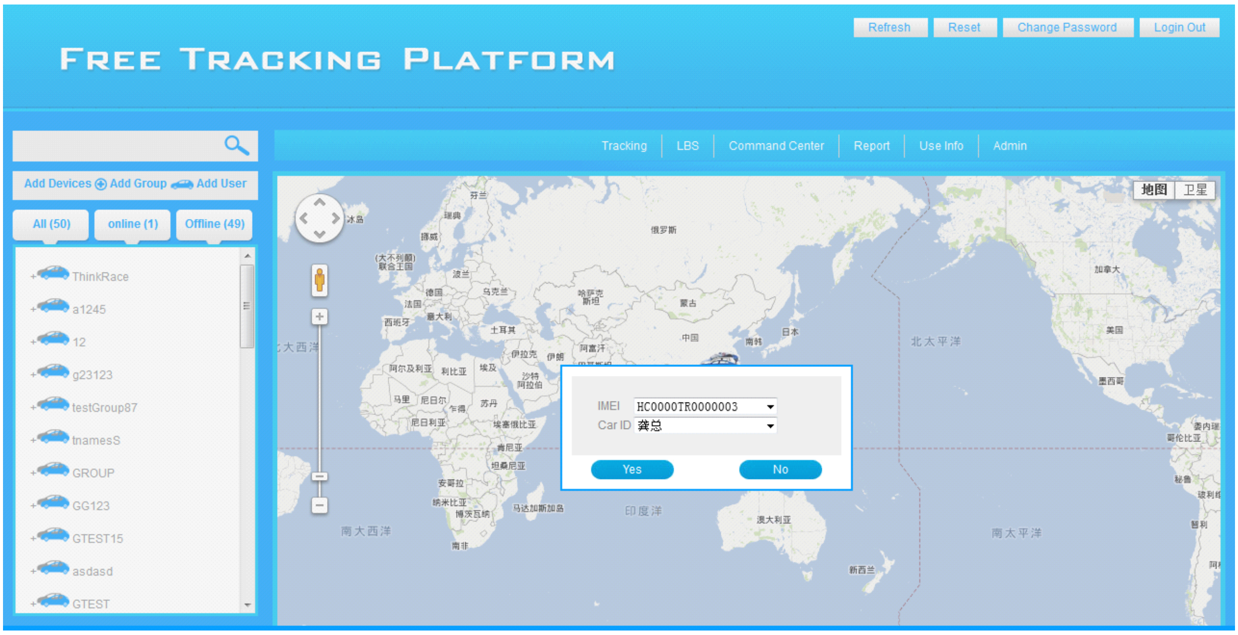


There is dialog box to let user confirm if cancel all alarm or not ,after choose ,the tracker has not any alarm function inside ,the photo as below :

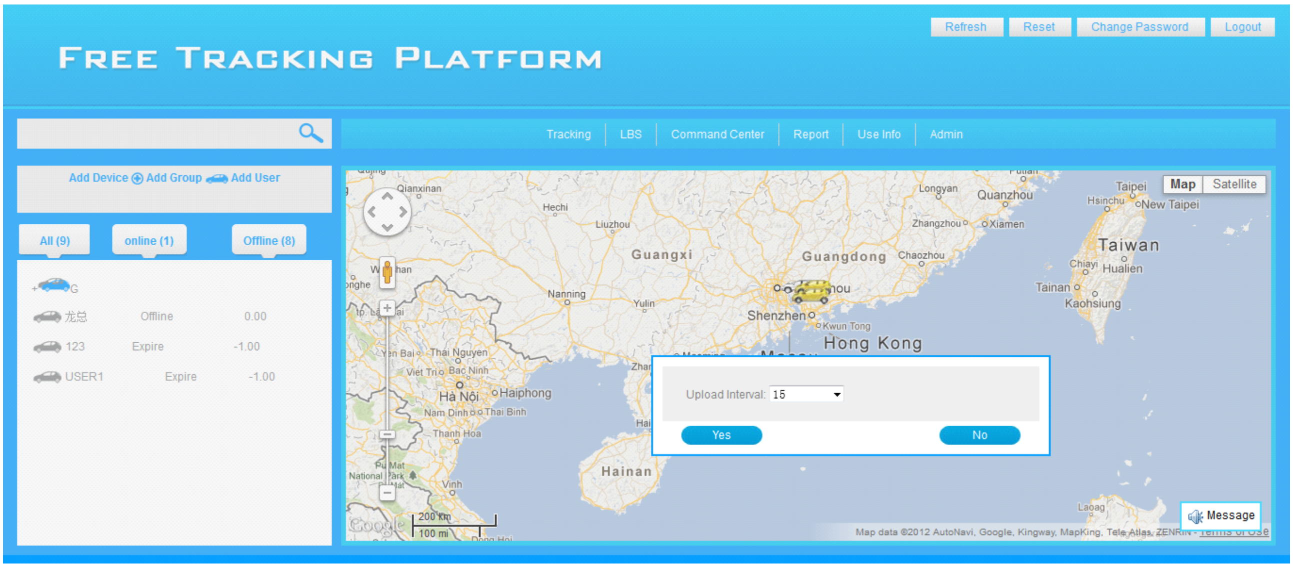


9 , Upload Interval

The tracker default upload interval time is 30 sec ,but user can choose the different upload interval time from 15 sec-240 sec as they like ,the photo as below :



After change the upload interval time , user can check if the function was setted or not , though check the history track , every data has the time difference .



11 . Report

There is report style in report function

History Report

Alarm Report

1 History Report

As below photo , choose the ID , start and end time , confirm it then all history report will display , the user can click download button and stone in computer , the format is XLS , then user can check clearly .

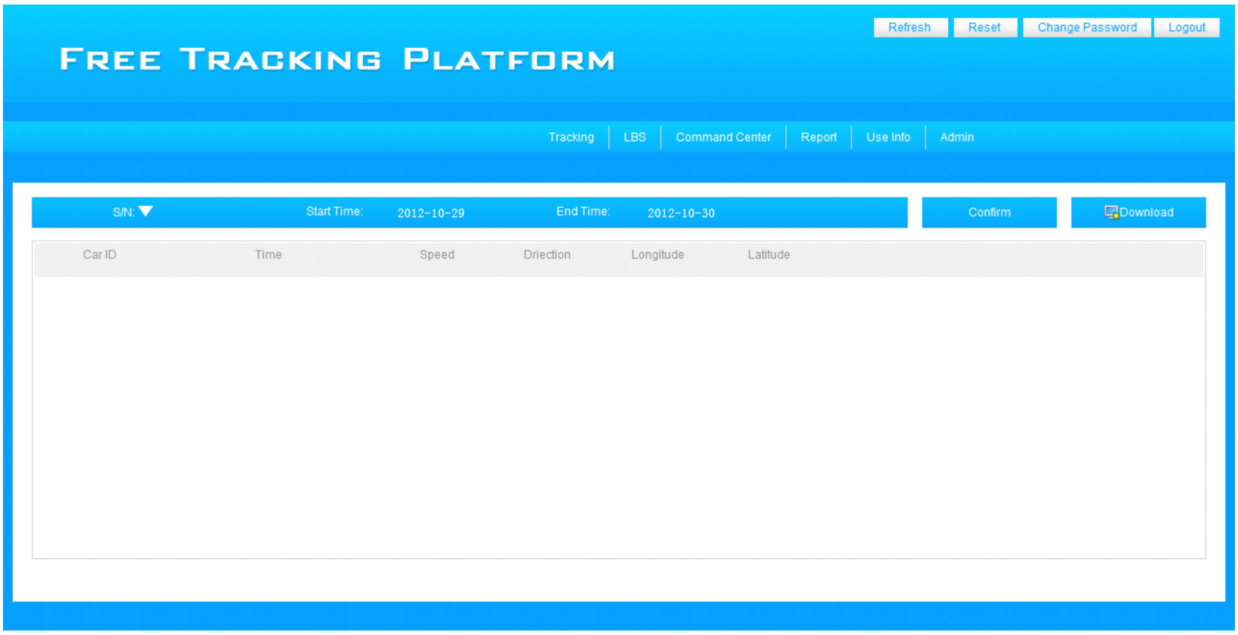


Photo 1

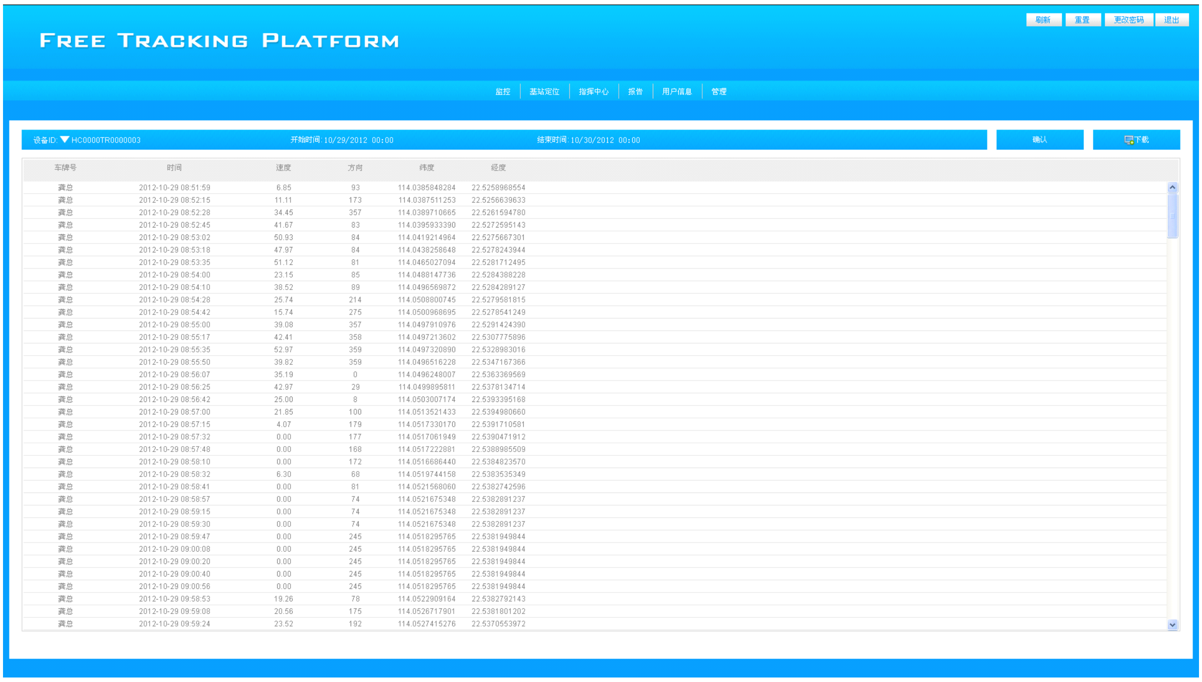
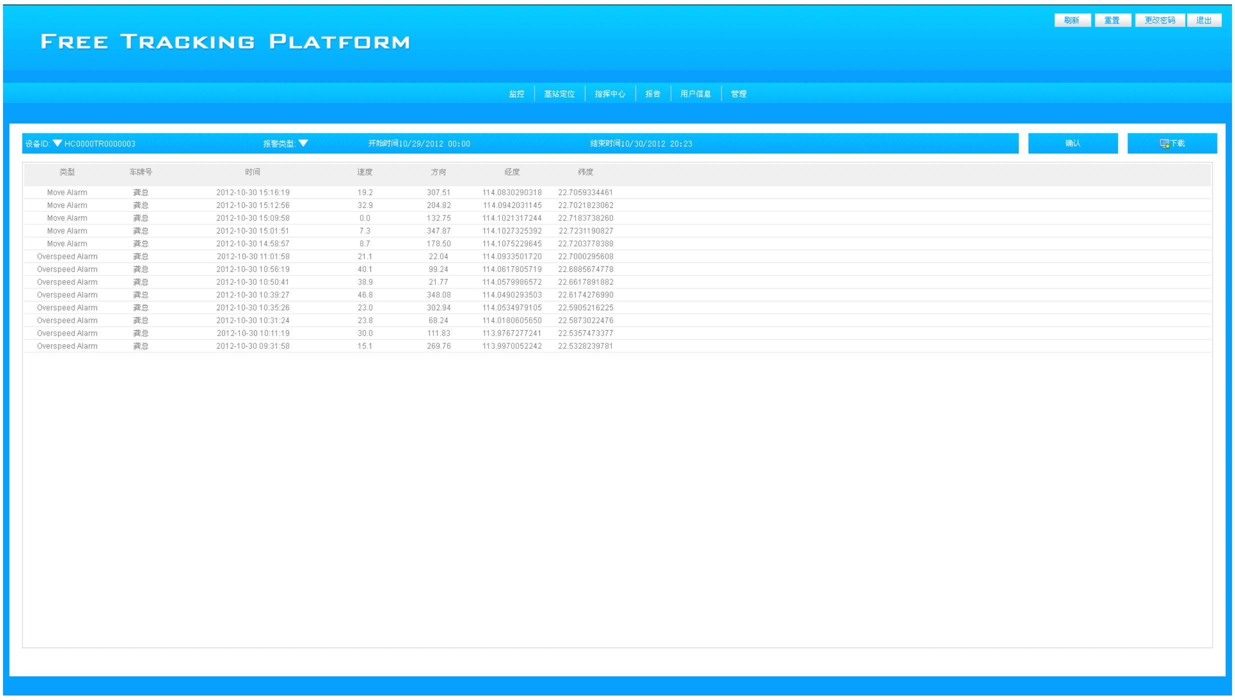


Photo 2

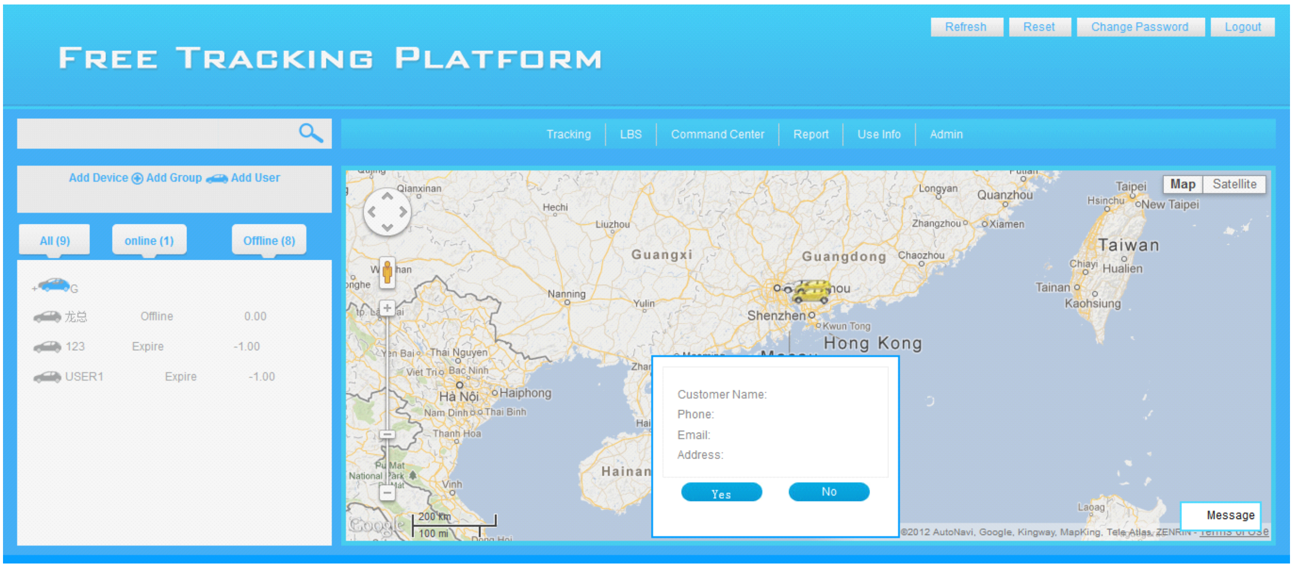
2 Alarm Report

As below photo , choose the ID , start and end time , confirm it then all alarm report will display , the user can click download button and stone in computer , the format is XLS , then user can check clearly .



12. User Info

Click "User info" button , user can add or modify the device information as they want , the dialog box as below



13. Admin

Admin function is help user reset the device Password or Group Password , if user change a new password but forget it , so they can use this function (the reset password is "000000"if customer want to change again , they can change it)

Click "Amin" button , the page will changed as below, input the device ID or Group ID in the space , then search the device and group , after find it , just click " Reset " button and the password will change to "000000"

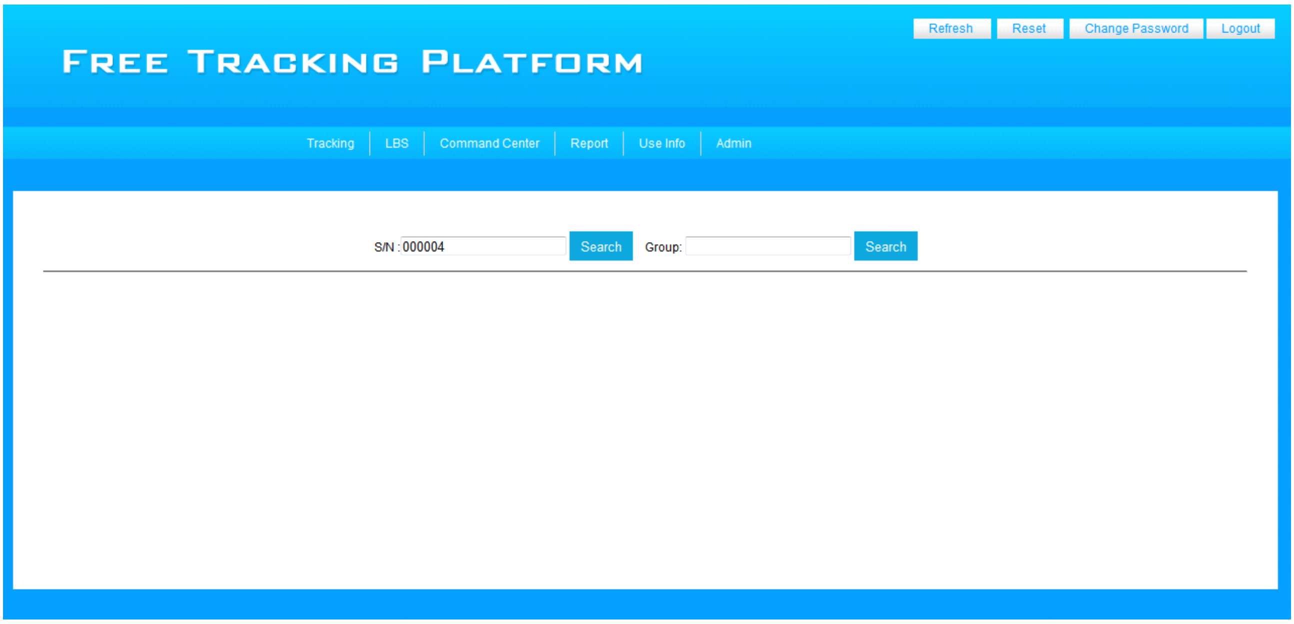


Photo 1

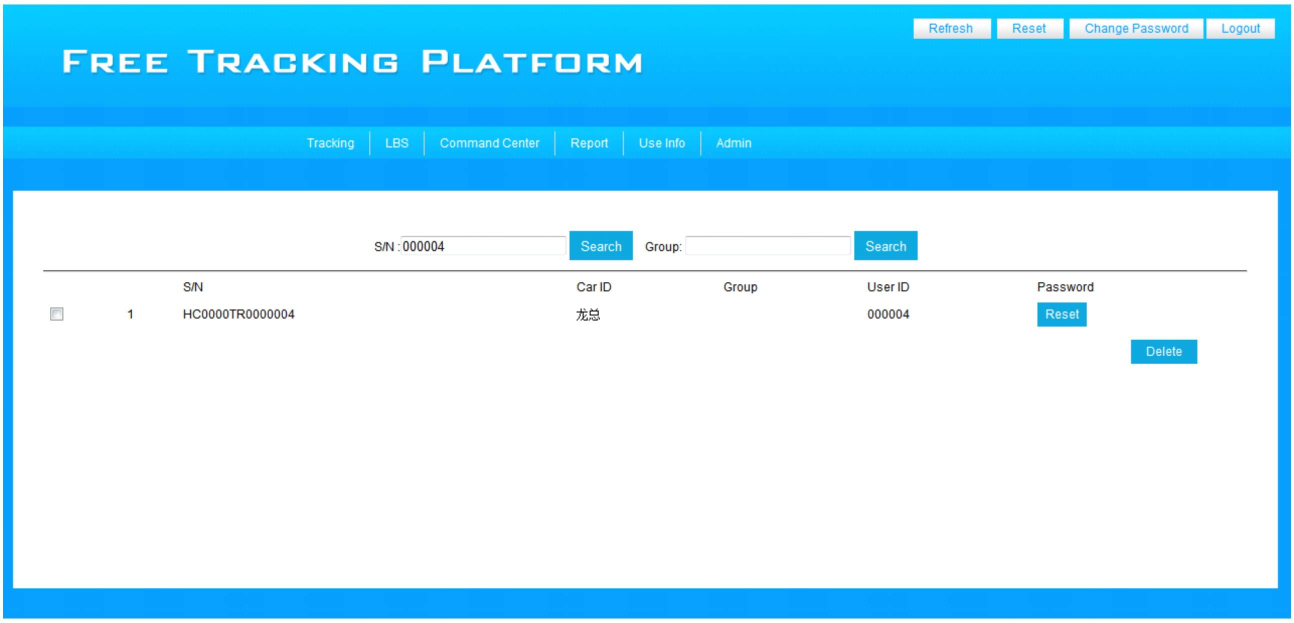


Photo 2

Attention: User can add device to the group that had been setted by themselves , but when user can't search the device , please contact with supplier or producer .

2, If user forget the device password or Group Password , please use reset function to reset , contact with supplier or producer .

3, Because this is Free Tracking Platform , the user number is going increase , and the server will stone more and more data , so we will delete the message center in fix time , We suggest user download related report in time .

5. Attention:

1. This GPS tracker built in GPS and GSM antenna , Please attention the installation position , we suggest install under the seat , back of seat , dash board , don't install the tracker into the metal box or rear box, this will stop tracker get GPS and GSM signal , anyway please try to test and find the best position to install the tracker .

2. Use the tracker backup battery will keep work around 10 hours , we suggest connect tracker with car battery like 12-24V voltage , the tracker built in power protect circuit , so will not happen over recharge problem.

3. Under normal condition , GPS locate need cost 10-200 sec , if some time the GSM net is bad or GSM net busy , so the user will get SMS reply delay . this belongs normal condition .

4. The track's data will keep 3month in our server , so the old data will be delete in fix time .

6. FAQ

1, The tracker will automatic power off .

Please confirm if there is enough power in the tracker or the voltage lower , please confirm SIM card install in right way , because tracker can't search GSM signal with long time , it will automatic power off also .

2, Power on , the tracker Green LED continue light , and the tracker don't reply command .

Please confirm the SIMCARD install in right way , and there is no PIN code , ensure the SIMCARD has enough money , after tracker GSM signal well , the Green LED will flash once in every 1 sec .

3. Why the tracker can't upload data to the server ?

Please confirm the SIMCARD open GPRS function , like set up APN , USER name and password (please contact with local SIMCARD provider) after set up well and the tracker is moving , the data will upload to the server , if the tracker not moving , it will not upload to the server .

4. Why the tracker don't reply ?

Please confirm if the SIMCARD open Caller ID and SMS service , and if there is enough money , and ensure the command and password is right .

5. Use the phone to call the tracker , but the tracker doesn't hang up ?

Please confirm if the tracker has been set up Preset number .

6 . Why can't log in the Platform ?

Please send command to tracker to check the ID , and use the reply ID and password try again , if the problem still in , please contact with us .

7 . Why there is space during the history tracker display ?Like lost data , not full .

If tracker into the place without GSM and GPS signal or signal weak , this may result in the tracker can't connect with server, or upload data continue , when the GSM and GPS signal well and stable , the tracker will automatic connect with server , and upload the data to the server that stored into the tracker , when uploading the data , If GPRS function problem , this will also result in lost the data , but this problem not happen usually .

■ If the problem still in , please contact with us or supplier .

7, Specification

Content	Specs
Dimension	119*60*29mm
Power save mode	Less than 5mA
GSM Module	G100 （UBLOX） Quad-Band 850 /900/1800/1900Mhz TCP/IP Internal Antenna
GPS Module	MAX-6Q (UBLOX) 50 tracking channels accuracy< 5m - 161dBm Internal Antenna Internal
Time to first fix (TTFF)	Hot Start less than 1 sec Warm Start less than 33 sec Cold Start less than 35 sec
LBS:Accuracy	City:100m~300m Suburbs: 0.5~20km
Storage Temp	-40~85 C
Operation Temp	-30~80 C
Power	12-24V Recharge battery 5V Li-battery：2000mAh

After Sale Service

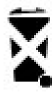
This system has been tested before sold, we ensure it can work stable below low or high temperature . We strongly recommend you to get this system installed by professional. There is a one-year warranty except the following condition:

1 Installation , or connect wire broken by personally or unprofessional.

2. Warranty will eliminate if the ownership of the tracker has been changed.
3. Parts damaged or lost by man-made
4. Battery , adapter , wires , etc.

Warning: this device is just a auxiliary product that applying the location of current object, we have not any responsibility if you have damage or lost in using this tracker.

Notes: The explanation of this manual is belonged to our company, some small changes may not notice customer, any problems please contact us, thanks !



This symbol indicates that your product must be disposed of properly according to local laws and regulations. When your product reaches its end of life, contact TRACETREE or your local authorities to learn about recycling options.

Important Safety News:

Warning :No follow this safety instruction will result in fire or any other damage.

It built in lithium battery ,please don't take out the battery ,This battery only can take out or change by producer,if the user take out by themselves ,it means they are give up the warranty term ,Because of to change the battery and result in another problem ,our company will not take any responsibility